WHAT IS CLAIMED IS:

1. A method for recovering data contained in a signal, comprising:

detecting a first group of pulses contained in said signal;

producing one or more measurements for one or more parameters which characterize said first group of pulses; and

determining an information symbol based on said one or more measurements.

2. The method of claim 1 wherein said producing includes detecting a second group of pulses, at least one of said one or more parameters being based on said first and second groups of pulses.

3. The method of claim 2 wherein said at least one of said one or more parameters is based on a timing relationship between said first and second groups of pulses.

4. The method of claim 2 wherein said second group of pulses immediately follows said first group of pulses.

5. The method of claim 1 wherein said detecting, producing, and determining are repeated to produce a plurality of information symbols.

6. The method of claim 1 wherein said information symbol represents a binary value comprising one or more bits.

7. The method of claim 1 wherein said one or more parameters includes parameters selected from the group consisting of: a group period (T_1), a pulse width (T_2), a pulse separation (T_3), a silent period (T_4), and number of pulses (N_p).

8. A method for recovering data from a signal, comprising:

providing a set of information symbols;

detecting plural groups of pulses; and

for each group of pulses:

measuring one or more parameters which characterize said each group of pulses to produce one or more measurements corresponding to said each group of pulses; and

associating said each group of pulses with one of said information symbols based one or more of its corresponding one or more measurements.

9. The method of claim 8 wherein said measuring is based on two or more of said groups of pulses.

10. The method of claim 8 wherein each of said information symbols represents a binary number comprising one or more bits.

11. The method of claim 8 wherein said set of information symbols represents N-bit binary numbers, said set comprising 2^N unique information symbols.

12. The method of claim 8 wherein said detecting includes receiving said signal and transforming said signal to produce said groups of pulses.

13. The method of claim 8 wherein said one or more parameters includes parameters selected from the group consisting of: a group period (T_1), a pulse width (T_2), a pulse separation (T_3), a silent period (T_4), and number of pulses (N_p).

14. A method for producing data, comprising:

receiving a signal;

producing from said signal a plurality of groups of pulses, each group of pulses characterized by a set of parameters;

detecting said groups of pulses in said signal; and

mapping each of said groups of pulses to an information symbol based on one or more of said parameters of each of said groups of pulses.

15. The method of claim 14 wherein said mapping includes measuring one or more of said parameters for each of said groups of pulses.

16. The method of claim 14 wherein said mapping includes measuring at least two of said parameters for each of said groups of pulses, said mapping being based on said at least two parameters.

17. The method of claim 14 wherein said set of parameters includes: a group period (T_1); a pulse width (T_2); a pulse separation (T_3); a silent period (T_4); and a number of pulses (N_p).

18. The method of claim 14 wherein said information symbol corresponds to a multi-bit datum.

19. The method of claim 14 wherein said information symbol corresponds to a one-bit datum.

20. The method of claim 14 wherein said detecting includes:

detecting a first set of groups of pulses and detecting a second set of groups of pulses, said first and second sets having at least one common group of pulses;

measuring one or more of said parameters of said common group based on groups of pulses in said first set to produce first measurements; and

measuring said one or more of said parameters of said common group based on groups of pulses in said second set to produce second measurements,

said mapping including mapping said common group to an information symbol based on said first and second measurements.

21. A method for recovering information from a signal, comprising:

(a) detecting a first set of groups of pulses contained in said signal;

(b) detecting a second set of groups of pulses contained in said signal;

(c) for each group of pulses in said first set, measuring one or more parameters to produce one or more first measurements corresponding to said each group of pulses in said first set;

(d) for each group of pulses in said second set, measuring one or more parameters to produce one or more second measurements corresponding to said each group of pulses in said second set; and

(e) for each group of pulses that is common to said first and second sets, producing an information symbol based on its first and second measurements.

22. The method of claim 21 further including in step (c) mapping one or more of said first measurements to a first candidate information symbol and in step (d) mapping one or more of said second measurements to a second candidate information symbol; wherein in step (e) said producing is based on said first and second candidate information symbols.

23. The method of claim 21 further including detecting additional sets of groups of pulses; producing additional one or more measurements for each additional set of groups of pulses; and producing said information symbol based on said first, second, and said

additional one or more measurements for each group of pulses that is common to each of said sets of groups of pulses.

24. The method of claim 21 wherein said parameters include: a group period (T_1); a pulse width (T_2); a pulse separation (T_3); a silent period (T_4); and a number of pulses (N_p).

25. The method of claim 21 wherein said information symbol corresponds to a multi-bit datum.

26. The method of claim 21 wherein said information symbol corresponds to a one-bit datum.

27. A method for retrieving data contained in a signal comprising plural groups of pulses, comprising:

launching at least two detection windows, each detection window being delayed relative to a first group of pulses;

for each of said detection windows, determining a pulse count of pulses contained therein, to produce a first pulse count and a second pulse count; and

identifying an information symbol based on said first and second pulse counts, thereby retrieving information from said pulses.

28. The method of claim 27 wherein said at least two pulse counts are different.

29. The method of claim 27 wherein said detection windows are launched one at a time.

30. The method of claim 27 wherein said detection windows have different delays.

31. The method of claim 27 wherein said identifying is a step of mapping the detection window having the higher of the two pulse counts to said information symbol.

32. A system for recovering data from a signal, said signal comprising a plurality of groups of pulses, the system comprising:

detection means for detecting one of said groups of pulses;

measurement means, coupled to said detection means, for measuring one or more parameters which characterize said one of said groups of pulses; and

symbol means, coupled to said measurement means, for mapping said one or more of said parameters to an information symbol.

33. The system of claim 32 wherein said one or more parameters includes parameters selected from the group consisting of: a group period (T_1), a pulse width (T_2), a pulse separation (T_3), a silent period (T_4), and number of pulses (N_p).

34. The system of claim 32 wherein said one or more parameters is based on a timing relationship between said groups of pulses.

35. The system of claim 32 wherein said symbol means for mapping produces said information symbol based on at least two of said parameters.

36. The system of claim 32 wherein said measurement means includes:

first and second pipelines, each having an input and an output, each configured to produce measurements for two or more groups of pulses, said second pipeline further configured to provide a delay of one group;

a first delay unit coupled to said first pipeline output;

a second delay unit coupled to said second pipeline output; and

a decision component having an input, said first and second delay units coupled to said input,

said first and second delay units configured to provide a delay during processing of said two or more groups of pulses.

37. The system of claim 36 wherein said first and second delay units each is configured to provide a variable delay, said variable delay depending on a group period of a group of pulses.

38. A circuit for recovering data contained in a signal, comprising:

a first logic block having an input for receiving said signal and configured to detect a first group of pulses contained in said signal;

a second logic block configured to produce measurement data indicative of one or more parameters which characterize said first group of pulses; and

a third logic block configured to determine an information symbol based on said one or more measurement data.

39. The circuit of claim 38 wherein said circuit is a field programmable gate array, said first, second, and third logic blocks being portions of said field programmable gate array.

40. The circuit of claim 38 wherein said circuit is an application specific integrated circuit.

41. The circuit of claim 38 wherein said second logic block includes logic circuits configured to detect a second group of pulses, at least one of said one or more parameters being based on said first and second groups of pulses.

42. The circuit of claim 38 wherein said third logic block is further configured to determine said information symbol based on measurement data for at least two of said parameters.

43. The circuit of claim 41 wherein said at least one of said one or more parameters is based on a timing relationship between said first and second groups of pulses.

44. The circuit of claim 41 wherein said second group of pulses immediately follows said first group of pulses.

45. The circuit of claim 38 wherein said information symbol represents a binary value comprising one or more bits.

46. The circuit of claim 38 wherein said one or more parameters includes parameters selected from the group consisting of: a group period (T_1), a pulse width (T_2), a pulse separation (T_3), a silent period (T_4), and number of pulses (N_p).